House Bill Analysis HB 2462

HOUSE AGRICULTURE AND ECOLOGY COMMITTEE

January 27, 2000

House Bill 2462 requires entities involved in water quality monitoring to notify residents when: local health officers have determined that an exceedance of the state's standards for microbial contamination presents a public health risk.

BACKGROUND:

Water quality standards

Water quality standards and monitoring requirements are established by the Washington Department of Ecology for ambient water quality, and by the Department of Health for drinking water quality, recreational water contact facilities, and swimming beaches. No single standard exists. The authority for the Department of Ecology's standards come from the state's water pollution control act, and the authority for the Department of Health's standards comes from the state's overall responsibility for public health (RCW 43.20.050).

The Department of Ecology's water quality standards vary depending on the classification of a body of water. Water bodies are classified as extraordinary— (class AA), excellent— (class A), good— (class B), fair— (class C), and lakes. The classification is derived from the kind of use that is expected from a water body; for example, domestic water supply, shellfish growing, or irrigation. The most limiting use defines the classification. The standards set the upper limit for how much contamination can be allowed in a body of water and still meet the use for which it is classified.

Therefore, each of the five water body classifications has a different standard for fecal coliform. Fecal coliform is a kind of microbial contamination. Fecal coliform standards range from no more than 50 colonies per 100 milliliters of water— for class AA waters, to no more than 200 colonies per 100 milliliters of water— for class C waters. Lakes are expected to maintain the same water quality as class AA waters.

Monitoring of drinking water by purveyors occurs primarily within the distribution system *after* the water has been treated. This is to ensure that the water being delivered to consumers meets all applicable standards. Unlike for ambient water quality, the standard for bacteriological contamination in drinking water supplies is zero. A very limited amount of monitoring takes place outside of the intake point for the water system. The purpose of such

monitoring is to determine how much and what kind of water treatment is necessary.

Water quality monitoring

Water quality monitoring is carried out by various state and local agencies for a variety of purposes. The Department of Ecology maintains a number of water quality monitoring stations around the state to determine whether various water quality standards are being met. Other public entities, such as local health departments and public utility districts contribute to this network of monitoring stations.

Public and private entities that operate water departments are required to monitor their drinking water systems by taking representative samples from throughout the distribution system. For coliform bacteria, the level of monitoring « that is, the number of samples required « depends upon the size of the population served by the system. If coliform presence is detected in any sample taken from the system, the purveyor is required to take a repeat sample. A violation of water quality standards occurs if a repeat sample shows the presence of coliform bacteria or e-coli. When a violation occurs, the water purveyor is required to notify the consumers served by the system and to advise them to boil water before use until the problem is corrected..

Monitoring of swimming beaches and of shellfish growing areas also takes place by the department of health or local health departments..

Holders of national pollutant discharge elimination system (NPDES) permits are required to monitor their discharges to ensure that effluent limits set within their permits are not exceeded.

Public notification

When a violation of standards occurs, information provided to consumers is either in the form of a boil water—notice, in the case of drinking water supplies, or in the form of annual reports, for general water quality trends. Signs are posted in the case of swimming restrictions. No local entity provides direct mailing to residents

Surface water contamination and risk to children

A seven-year-old boy in Everett became ill after drinking untreated water from a creek running through his backyard. His symptoms lasted for months. The City of Everett posted signs along the creek about one year after the boy drank from it, and six months after a doctor from the University of Washington advised the city to notify residents neighboring the creek. Samples from the creek were shown to exceed the state's standard by up to ten times. The cause of the contamination has been determined to be microbial contamination originating from pet waste.

SUMMARY:

House Bill 2462 requires water purveyors, public utilities, cities or towns, and counties to screen any water samples they may take, or be required to take, for any exceedance of existing standards for microbial contamination. If an exceedance is found, the entity that did the sampling is required to consult with local health districts within 48 hours to determine whether the water presents a public health risk.

If the water is found to present a risk to the public, the entity is required to identify the residents within 500 feet of either side of the water body extending upstream and downstream to where the next monitoring station or sample point is located, and to notify these residents by mail within 48 hours of receiving the laboratory analysis.

The mailing is required to identify the standard that was exceeded, the degree of exceedance, and the risk posed by ingestion or other contact with the water. The mailing is also required to advise that in the absence of water quality information, residents should assume untreated surface water is not safe to drink. In addition, the entities responsible for sampling must also post with warning signs any stream where an exceedance of microbial contamination is determined to pose a public health risk.

Holders of NPDES permits are also required to screen their water sample results for exceedances of standards related to microbial contamination. If an exceedance of any state standard shows up, they are required to submit the sample to the local health district for an assessment of risk. They are also required to notify residents by mail of any public health risk that may be presented by the contamination.

Health districts are required to make determinations of public health risk presented by untreated surface water found to exceed standards for microbial contamination upon request of water purveyors, counties, cities, towns, public utility districts, or holders of NPDES permits.